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(54) Contraceptive devices

(57) A contraceptive coil is proposed which comprises a "Y"-shaped body (1) having a coil provided (1', 2') on each respective limb thereof, the coils (1', 2') prevent the passage of spermatozoa within the uterus both adjacent the entrance thereto and at the widened portion inwardly thereof.

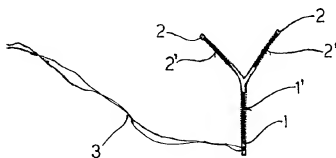
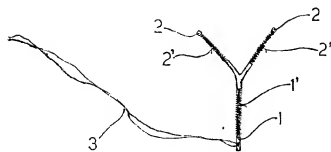
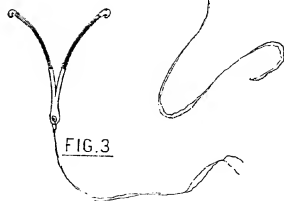
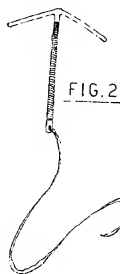
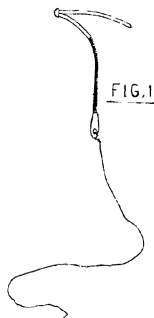


FIG. 4

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## SPECIFICATION

## Contraceptive devices

- 5 The present invention concerns contraceptive devices and has more particular reference to an inter-uterine contraceptive spiral.

The preferred applications for the contraceptive device are doubtless those which guarantee a complete sexual intercourse without the danger of having the spermatozoa fertilize the ovule.

Three types of contraceptive based on the idea of mechanical prevention and that prevention arising from the magnetic induction created by bobbins coil-wound with copper wire which, once inserted and fixed inside the uterus tube and activated by the uterus secretion, form electromagnetic fields which prevent spermatozoa from reaching and fertilizing the ovule are known.

The first type consists of an "S"-shaped element of plastics material having the coil-winding of the bobbin around the leg of the "S", the upper part of the element locating the same in position. The second type is a generally "T"-shaped element also having the coil-winding of the bobbin only around the leg of the "T", the head part of the "T" serving to prevent the element from sliding from its intended position. The third type is a "V"-shaped element, the limbs of the element being outwardly curved to prevent such element sliding out and both limbs of the "V" being coil-wound bobbins.

The first two types of these elements form the magnetic field within the uterus tube, in a position corresponding to the coil bearing legs of the elements while with the third type of element the magnetic field is built up at the inner part of the uterus tube. Thus with the first two types the contraceptive capacity develops only inside the uterus tube, leaving the inner part of the orifice unprotected.

In the case of the third type, the contraceptive capacity develops only at the inner opening of the uterus tube, thereby leaving the tube itself protected only by the mechanic prevention arising from the leg itself.

Furthermore, when the spermatozoa has passed these barriers (in each one of the illustrated cases always one magnetic or spiral barrier) it may easily happen that it is still effective and able to fertilize the ovule.

According to the present invention there is proposed a contraceptive spiral comprising a Y-shaped body part of flexible plastics material for introduction into and location within the uterus tube, having for its extraction a thread fastened to a hole at the lower end of the leg of the "Y", wherein the leg and the respective arms of the "Y"-shaped body are each coil-wound with a wire of copper or other suitable metal to form three bobbins, the leg being intended to be located in the uterus tube and the arms being intended to be located in the widened inner part of the said uterus tube.

Thus, with the present invention the drawbacks of the prior art coils are obviated by developing two antifertilizing barriers. The first one inside the uterus

tube and the second one corresponding to the widening of the opening inside the tube.

In theory this way an absolute safe barrier with an electromagnetic and a mechanic field is developed which both prevent the passage of the spermatozoa so it may not reach and fertilize the ovule.

The invention will now be described further, by way of example only, with reference to the accompanying drawings in which:-

Fig. 1 illustrates the first type of known element of "S"-shape;

Fig. 2 illustrates the second type of known element of "T"-shape;

Fig. 3 illustrates the third type of known element of "V"-shape; and

Fig. 4 represents the element of the present invention.

Referring now to Fig. 4 of the drawings, the element shown therein, which element is constructed in accordance with the present invention, differs from the elements of Figs. 1 to 3, in that it has a leg 1 which defines a coil-wound bobbin 1' for location and fixing inside the uterus tube and two arms 2, each constituting a respective coil-wound bobbin 2' the arms on being inserted through the uterus tube being bent in known manner and, when in position, automatically opening on account of their elasticity and engaging the widened inner part of the tube.

A thread 3 is fastened to a hole at the lower end of the leg 1 and extends from the mouth or tube, and passes through the vagina to provide a means for removing the element at any desired moment.

The present invention is not limited to the exact features of the embodiment hereinbefore described, and alternatives will readily present themselves to one skilled in the art.

## CLAIMS

1. A contraceptive spiral comprising a "Y"-shaped body part of flexible plastics material for introduction into and location within the uterus tube, having for its extraction a thread fastened to a hole at the lower end of the left of the "Y", wherein the leg and the respective arms of the "Y"-shaped body are each coil-wound with a wire of copper or other suitable metal to form three bobbins, the leg being intended to be located in the uterus tube and the arms being intended to be located in the widened inner part of the said uterus tube.

2. A contraceptive spiral substantially as hereinbefore described with reference to and as illustrated in Fig. 4 of the accompanying drawings.

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